# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC

In the matter of:	)	
	)	
Proposals for a New FM Radio Broadcast Class	)	
C4 and to Modify the Requirements for	)	MB Docket 18-184
Designating Short-Spaced Assignments	)	
	)	

#### **SUMMARY**

REC Networks answers the Commission's *Notice of Inquiry* in the above captioned proceeding. REC holds a position that areas of our nation where there are limited FM services could benefit from some expanded services. At the same time, we must strike a balance between the expansion of primary FM services and the unique services provided by LPFM stations as well as the services provided by FM translators, especially those just recently obtained through the filing windows and other opportunities related to AM Revitalization.

On the Class C4 aspect of the proposal, REC will demonstrate the unique nature of the Class A service as a "catch-all" service class including a considerable number of stations that are operating with well under maximum facilities due to various reasons and questions how many Class A FM stations will be able to upgrade because of the nature of some Class A stations as well as the expense and logistics behind converting to directional facilities, especially for smaller and minority-owned stations.

To reduce the impacts of the Class C4 service class on the LPFM service, REC is proposing that LPFM stations be permitted to protect Class C4 at the same co- and first-adjacent channel distances as LPFM stations protect Class A stations. This can be done in complete statutory compliance with the Local Community Radio Act.

REC will oppose the proposal to make a nationwide change to §73.215 which would result in a large number of class upgrades (beyond A to C4) causing additional interference to and displacement of LPFM and FM translator stations including those recently obtained in AM Revitalization as well as eliminate future LPFM opportunities for communities of all sizes. REC will be receptive of a restrictive waiver process that would permit for the use of the §73.215 rule in a manner that it is limited to class A to C4 upgrades and limited to stations that serve communities completely outside of the Census Bureau's designated Urbanized Areas as this arrangement would meet the special needs of deep rural areas while reducing the chances adverse actions against LPFM and FM translator stations, especially those in urban and suburban areas.

REC will provide data to support its positions.

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APPENDIX A – PROPOSED RULES

APPENDIX B – RAW DATA FROM \$73.215 UPGRADE STUDY AND IMPACTS TO LPFM STATIONS

APPENDIX C – RAW DATA FROM C4 TO LPFM IMPACT STUDY

Appendices B and C have been placed in a separate file included with this pleading.

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### **COMMENTS OF REC NETWORKS**

#### I. INTRODUCTION

1. Founded in 1984, REC Networks (REC) is a leading advocacy voice for a citizen's access to spectrum through broadcast and other radio services. REC's constituency includes but is not limited to Low Power FM (LPFM), rural commercial and noncommercial broadcasting and non-broadcast services such as the Amateur Radio Service. In these *Comments*, REC will address the issues raised by the Commission in the *Notice of Inquiry (NOI)* in the above captioned proceeding released on June 5, 2018.

#### II. BACKGROUND

#### A. SSR Petition for Rulemaking

2. New C4 Service Class. In a Petition for Rulemaking filed by SSR Communications ("SSR"), SSR petitioned the FCC to create a new C4 class of service for FM broadcast services. The technical parameter of the proposed service is 12 kW at 100 meters height above average terrain (HAAT). The intention of the new C4 service class would be an upgrade from Class A which is 6 kW at 100 meters HAAT. In support of their Petition, SSR states that the new C4 service class would "fill-in the current incompatible effective radiated level power gap between FM Class A and FM Class C3 allocations, thereby attaining a near-

<sup>&</sup>lt;sup>1</sup> - See SSR Communications, Petition for Rulemaking, RM-11727 (Received January 22, 2013) ("Petition").

<sup>&</sup>lt;sup>2</sup> - *Petition* at 2.

<sup>&</sup>lt;sup>3</sup> - See 47 C.F.R. §73.210(b)(1).

uniform 3.0 Decibel relationship between the maximum effective radiated power levels for each adjacent FM service class." Under SSR's plan, the C4 service class would only be available in FM Zone II. Using a conservative estimate, SSR claimed that using the current methods of FM station protections in §73.207 and §73.215, 376 of 1,236 (or 30.4%) of Class A FM stations would be able to upgrade to Class C4. Finally, SSR states that the public interest would be met because the proposal would result in 16 existing minority-owned FM stations being able to place a better signal over Nielsen Audio rated markets and overall, upgrade opportunities for "dozens, if not hundreds" of minority-owned stations.

3. Section 73.215 Proposal. Under the current rules in §73.215, full-service FM stations that have currently not elected short-spacing under §73.215 are protected to the maximum reference ERP and HAAT for their respective service class. In an effort to maximize the availability of C4 upgrades, SSR proposes a "show cause order procedure" for existing FM stations that are currently not authorized under §73.215 to accept a §73.215 designation if their facilities have been operating below their maximum-class ERP and reference antenna HAAT "for a period of ten consecutive years preceding the filing date of the "triggering" station's application". Under SSR's proposed policy, the licensee of the affected station would be offered a 180-day period in which to file a Form 301 to specify full-facilities, otherwise, the C4 upgrade can take place. <sup>10</sup>

<sup>&</sup>lt;sup>4</sup> - *Petition* at 5.

<sup>&</sup>lt;sup>5</sup> - Id.

<sup>&</sup>lt;sup>6</sup> - *Petition* at 6.

<sup>&</sup>lt;sup>7</sup> - Id.

<sup>&</sup>lt;sup>8</sup> - See 47 C.F.R. §73.215(b)(ii).

<sup>&</sup>lt;sup>9</sup> - *Petition* at 9.

<sup>&</sup>lt;sup>10</sup> - Id. at 10.

#### **B.** Notice of Inquiry

4. On June 5, 2018, the Commission released a *Notice of Inquiry* (NOI) in this proceeding. In the NOI, the Commission seeks comments on SSR's proposals and other related issues including the impacts on the statutory mandate that the Commission provides a nationwide "fair, efficient and equitable distribution of radio service". <sup>11</sup>

#### III. DISCUSSION

5. REC provides comments on the various issues raised in this NOI and their impact on other broadcast services, primarily, the Low Power FM (LPFM) service. Our comments are based on custom studies performed by REC designed solely for this proceeding, our interpretation of regulatory and statutory language including the *Local Community Radio Act of 2010* ("LCRA")<sup>12</sup> and various REC position statements supporting our promotion of LPFM and broadcast stations in rural areas. We will format our comments based on the order the issues are brought up in the NOI.

#### A. Class C4 Proposal

#### i. Affected stations and their listeners.

6. As a part of REC's daily updates to our database tools that drive sites like *FCCdata.org* and *FCC.today*, REC performs a study of Class C4 upgradability for all Class A FM stations located in FM Zone II. This study is based on an upgrade taking place at the station's currently authorized site. Based on a study conducted with data effective as of the close of business on August 9, 2018, REC has determined that 171 Class A FM stations can upgrade in place using the SSR-proposed §73.207 minimum distance separation values. In addition, just based on distance separation only, an additional 931 Class A FM stations may be able to upgrade in place using §73.215 distance separation. It is important to realize that for the 931 Class A FM stations that may be able to upgrade using §73.215 distance separation, this study does not determine whether or not it would be possible for an upgrade that also meets the prohibited

<sup>&</sup>lt;sup>11</sup> - See NOI ¶11; 47 U.S.C. §307(b).

<sup>&</sup>lt;sup>12</sup> - Pub. L. No. 111-371, 124 Stat. 4072 (2011).

contour overlap aspect of the existing and proposed §73.215 regulations. Our daily study also does not take into consideration alternate sites that some stations may be able to use to achieve an upgrade.<sup>13</sup>

7. We also need to point out that unlike other FM service classes, Class A is a "catch-all" for any FM broadcast service with a service contour of less than 28.3 kilometers. 14 Currently, there are 17 Class A stations with service contours at or less than the absolute bare minimum (5.636 kilometers based on 100 watts at 30 meters HAAT). There are many Class A FM stations that are not even operating at the former Class A parameters of 3 kW at 100 meters HAAT (24.223 km service contour). Of the Class A stations that REC has identified as potential upgrades in place to Class C4, we have broken them down by service contour size:

Service Contour Size	Facility IDs that can upgrade using proposed §73.207 distances	Facility IDs that can upgrade using proposed §73.215 distances	Facilities that meet any C4 spacing.
Less or equal to 14 km	72 (42.1%)	23 (2.5%)	95 (8.6%)
(REC defined "Small	, ,		, ,
Class A" 0.4kW at			
100m HAAT)			
Between 14 and 19	22 (12.9%)	39 (4.2%)	61 (5.6%)
km (Between 0.3~1.2			
kW at 100m HAAT)			
Between 19 and 24	21 (12.4%)	153 (16.4%)	174 (15.8%)
km (Between 1.2~3			
kW at 100m HAAT)			
Greater than 24 km	56 (32.6%)	716 (76.9%)	772 (70.1%)
(Between 3~6 kW at			
100m HAAT)			
	171 (15.6%)	931 (84.5%)	1,102

8. There could be many reasons why 30% of non-reserved band Class A FM stations are not operating at a facility greater than 24 kilometers. These reasons can include potential

<sup>&</sup>lt;sup>13</sup> - REC's daily *c4\_upgrade* internal program takes only the following facilities into consideration: Class A FM application records located within Zone II while excluding records related to vacant allotments and STAs and operating on channels 221 through 300 (92.1~107.9). "Upgrade in place" is based on the same location, same radiation center above ground level and same channel.

<sup>&</sup>lt;sup>14</sup> - See 47 C.F.R. §73.211(b)(1).

international issues as well as FM stations that are "right-sized" or geographically restricted based on terrain, facility availability or economic issues. Many of these stations cannot justify an upgrade, despite meeting minimum distance separation. As demonstrated here, a very large majority of stations would need to depend on §73.215 to make the upgrade. This means for many small rural and minority broadcasters, extensive expenses for directional antennas, related studies and surveyors for proof of performance. As we will discuss in this pleading, it may also entail a *Notice to Show Cause* to an incumbent FM station.

9. Therefore, in answer to the Commission's inquiries on affected stations and their listeners, it is REC's position that without an expensive elongated process, Class C4 is out of reach to Class A stations with limited budgets and such an impediment would definitely affect opportunities to minority broadcasters, especially for the 85% of the stations where §73.215 is required. If anything, the upgrade to C4 will make FM stations out of reach to minority new entrants and would only benefit incumbents. In deep rural areas such as those well outside of Urbanized Areas, especially those within current white and grey areas, the upgrade to Class C4 would be beneficial as a "lifeline" for permanent residents and transient listeners in those areas, however we see limited benefits within suburban and urbanized areas that are already wellserved by other broadcast services including full-service FM commercial, full-service FM noncommercial and LPFM broadcast stations. Localism dictates smaller, more focused stations than "rim shot" urbanized stations that ignore their community of license. This upgrade may be a short-lived nest egg for the incumbent broadcaster but makes radio well out of reach for minorities, women and the LGBT, especially in today's environment where ownership restrictions are slowly eroding away.

### ii. The impact of Class C4 on secondary services.

10. The NOI properly acknowledges the role that secondary services, such as LPFM stations play in the overall equation.<sup>17</sup> With that, the Commission is looking at various options

<sup>&</sup>lt;sup>15</sup> - See 47 C.F.R. §73.316(c)(2)(vii) and (viii).

<sup>&</sup>lt;sup>16</sup> - NOI at ¶10.

<sup>&</sup>lt;sup>17</sup> - Id. at ¶14.

relating to the relationship between upgraded stations and existing secondary services and how Section 5 of the LCRA applies in this situation. Some in the industry have even suggested the possibility of making FM translators that provide a fill-in service (e.g. for AM stations and for FM HD streams) a "primary" service with a level of protection that prevents their displacement, especially given the timing of the recent Auction 99 and 100 filing windows.

11. As a first point of order, REC wishes to make perfectly clear that Section 5(c) of the LCRA states that "FM translator stations, FM booster stations and low-power FM stations remain equal in status and secondary to existing and modified full-service FM stations". This means that FM translators, nor LPFM stations can't be afforded some kind of "protection" that would preclude any change to a primary or "primary-like" FM service. At one time, there was a level of protection for LPFM stations facing displacement from full-service FM stations making minor changes however that protection was nullified by the enactment of the LCRA. In order to make FM translators a primary service, it would require an act of Congress to amend the LCRA. Even in the absence of the LCRA, there are \$307(b) issues with making some FM translators primary, regardless whether or not the actual AM facility's license is surrendered. There are issues regarding the distribution of licenses to a particular community as well as community of license coverage issues. With that, REC does not support any attempt to make FM translators into a "primary" or "semi-primary" status by affording any special "protections" that could preclude a full-service FM station from making a minor change. 21

<sup>&</sup>lt;sup>18</sup> - See Id.

<sup>&</sup>lt;sup>19</sup> - See LCRA §5(c).

<sup>&</sup>lt;sup>20</sup> - See *Creation of a Low Power Radio Service*, Third Report and Order, 22 FCC Rcd 21912 (2007) at ¶68-71.

<sup>&</sup>lt;sup>21</sup> - REC supports a long-term plan that would reallocate 76 to 88 MHz (TV Channels 5 and 6) from television broadcasting to sound broadcasting and to migrate smaller AM stations into this spectrum. This kind of migration has been very successful in Japan. REC does recognize though that this type of change is well outside the scope of this proceeding.

- 12. In respect to LPFM stations, REC has evaluated all LPFM stations and their status towards the 1,102 Class A FM stations in Zone II that we have identified can be a potential upgrade using either §73.207 or §73.215. REC has identified:
  - 3 LPFM stations that are already short-spaced to Class A FM stations based on subsequent application activity by the Class A station,
  - 89 LPFM stations that currently do not meet the §73.807(a) "guideline" for a station receiving no interference.
  - As many as 51 LPFM stations would not meet the §73.807(a) "guideline" for a station receiving no interference if Class C4 is implemented.
  - As many as 22 new LPFM second-adjacent channel short-spacings would be created if Class C4 is implemented.
  - As many as 21 existing LPFM second-adjacent channel short-spacings would shorten if Class C4 is implemented.
- but the overall implementation will not impact LPFM in the same magnitude as it will impact FM translators. This is because of the design of the LPFM rules. The minimum distance separations for LPFM were written in a manner that allowed for a 20-kilometer buffer zone around the reference service contour for a service class. For example, class A stations had a 20 km buffer zone around its 28.3 km reference service contour thus meaning that LPFM would protect Class A like it had a 48.3 km service contour. As long as C4 remains in Zone II and the existing §73.215 rules remain in place, about 165 LPFM stations would be impacted in higher noise floors and limited availability to move due to newly triggered second-adjacent channel short-spacings.
- 14. Overall, the interference to LPFM stations will be moderate due to the presence of buffer zones and the locations of upgradable Class A stations in comparison to LPFM stations however, it is our position that there will be a significant negative impact to FM translators, especially those that were just obtained in Auctions 99 and 100.

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<sup>&</sup>lt;sup>22</sup> - See Creation of a Low Power Radio Service, Report and Order, 15 FCC Rcd. 2205 (2000) ¶64.

#### iii. Implementation procedures

15. With the adoption of Class C4, this will mean that the minimum service contour for Class C3 FM stations would increase from 28 to 33 kilometers. Because of the LPFM distance separation requirements, all full-service FM stations are considered as full facilities regardless their actual facilities. REC supports a blanket requirement that existing Class C3 stations with service contours of 33 kilometers or less be given an opportunity to file a construction permit application to specify a service contour of 34 kilometers or greater or otherwise they will be downgraded to Class C4.<sup>24</sup> This type of a downgrade will help make additional channels available for secondary use by current and future LPFM stations. REC supports a similar requirement for Class C facilities that are actually Class C0 as such a requirement would have a potential positive impact on LPFM stations.

#### iv. Class C4 and LCRA Sections 2 and 3

16. Section 2 of the LCRA requires the Commission to "prescribe protection for cochannels, and first- and second-adjacent channels." Section 3(b) of the LCRA states that the Commission shall not amend its rules to reduce the minimum co-channel and first- and secondadjacent channel distance separation requirements in effect of this Act between low-power FM stations and full-service FM stations. When the LCRA was enacted, those minimum distances, which are outlined in §73.807 of the Rules included station classes A, C3, B1, C2, B, C1, C0, C and D.<sup>27</sup> It did not include C4 as that class was not codified at the time of enactment. Therefore, the Commission is statutorily required to require some form of protections by LPFM stations towards Class C4 FM stations on co-channel, first- and second-adjacent channels; however, the Commission is not statutorily required to use a specific distance or distance

<sup>&</sup>lt;sup>23</sup> - See Id. ¶58.

<sup>&</sup>lt;sup>24</sup> - See NOI ¶16.

<sup>&</sup>lt;sup>25</sup> - LCRA §2 amending Pub. L. 106-553; 114 Stat 2762A-111 §632(a)(1).

<sup>&</sup>lt;sup>26</sup> - LCRA §3(b).

<sup>&</sup>lt;sup>27</sup> - See 47 C.F.R. §73.807(a) and (b).

<sup>&</sup>lt;sup>28</sup> - The LCRA became Public Law 111-371 on January 4, 2011.

separation at all. Contours could be used, but that's not what we are proposing in this proceeding.

- 17. When the Commission originally proposed a 250-watt LPFM service, it had determined that the "buffer zone" was no longer necessary and therefore proposed minimum spacing for 250-watt LPFM stations using the 100-watt minimum spacing and allowing the LPFM interference contour to cross into the "buffer zone" but in no case would the LPFM interference contour overlap with the full power service contour<sup>29</sup>.
- 18. If we were to create Class C4 with no buffer zone, the minimum co-channel distance could be 52 km. This takes into consideration the reference Class C4 60 dBu service contour (33.3 km) plus the 40 dBu interfering contour of the LPFM station (18.6 km).<sup>30</sup> This would of course put an inconsistency in the spacing tables considering that a co-channel LPFM to A is 67 km and to C3, 78 km. If we add in the 20-kilometer buffer zone, the minimum distance separation would be 72 km for co-channel and 61 km for first-adjacent channel.
- 19. With the creation of Class C4, we have an opportunity to create this class with a minimal impact to existing LPFM stations and future LPFM opportunities. We have already determined that the LCRA requires a form of protection, this is obvious. We have also determined that because since Class C4 was not codified in the rules in 2011 when the LCRA was signed by President Obama, there's no reference distance that the Commission must maintain for required distance-separation protections. We have also determined that the Commission has already found that the 20 km buffer zone overprotects full service stations. With all of these determinations, we have an opportunity to minimize the impact of the implementation of Class C4 on existing LPFM stations as well as future LPFM opportunities.

<sup>29</sup> - See Creation of a Low Power Radio Service, Fourth Notice of Proposed Rulemaking, 27 FCC Rcf 3364, 77 FR 21002 at footnote 125. (2012)

<sup>&</sup>lt;sup>30</sup> - Absolute minimum distance separation to first-adjacent Class C4 facilities would be the rounded sum of the Class C4 60 dBu service contour (33.3 km) and the 54 dBu interfering contour of the LPFM station (8.0 km) to equal 41 kilometers.

20. REC is asking that if C4 is implemented, that we use a minimum separation of 67 km for co-channel and 56 km for first-adjacent channel, the same as Class A. This will keep the tables consistent and maintain the separation for Class A required by the LCRA. Due to the increased service contour size, the second and third adjacent (where appropriate for radio reading services) spacing would be 34 km.<sup>31</sup>

§73.807(a): LP-100

FM station class	Co-channel minimum required	Co-channel fully spaced	200 kHz minimum required	200 kHz fully spaced	400/600 kHz minimum required
A	67	92	56	56	29
C4	67	104	56	57	34
C3	78	119	67	67	40

By using the same co-channel and first-adjacent channel minimum distance 21. separations from LPFM stations to both classes A and C4, we are creating a situation where if a Class A FM station upgrades in place to C4, it does not cause a new short-spacing thus giving the LPFM station the same flexibility they had before for making modifications and maintains the opportunity for new LPFM stations in the same manner as if the incumbent station was a Class A. Where a reference LPFM facility currently maintains a 20-kilometer buffer zone to a reference Class A facility, an LPFM station would still overprotect the upgraded Class C4 facility by maintaining a 15-kilometer buffer zone to the reference Class C4. Therefore, maintaining the same minimum co-channel and first-adjacent channel distances to Class C4 as LPFM does to Class A is good engineering practice as LPFM will continue to overprotect Class  $C4.^{32}$ 

<sup>&</sup>lt;sup>31</sup> - Second and third adjacent channel separation is based on the sum of the reference 60 dBu protected service contour for the station class plus the reference 100 dBu interfering contour for the LPFM service class.

<sup>&</sup>lt;sup>32</sup> - See Appendix A for proposed rule change.

#### B. Section 73.215 Proposal

- 22. The NOI invites comments on what the Commission describes as "generally on SSR's proposal [...] to create a procedure whereby an FM station in the non-reserved band (Channels 221-300), regardless of Zone or station class, could be designated as a Section 73.215 facility."<sup>33</sup> Unlike the C4 aspect of this Petition, the §73.215 proposal is not necessarily about rural growth. Instead, it has a very significant impact to urbanized areas and suburban areas.
  - i. A nationwide widespread change to §73.215 could have a devastating impact on community-based LPFM broadcast stations, Class D noncommercial educational stations, as well as rural, family and minority owned FM translators being used to rebroadcast AM stations.
- 23. While the Class C4 proposal will have a marginal impact on LPFM stations, the proposed changes to §73.215 can open an opportunity to thousands of FM stations to upgrade their service class. This goes beyond A to C4 but also includes C3 to C2, C2 to C1, C1 to C0, C0 to C, A to B1 and B1 to B.<sup>34</sup> Just based on distance separation at their current sites in respect to full-service stations that are operating at less than 85% of their maximum facility, we are looking at as many 3,206 FM stations meeting the §73.215 minimum distance separation for the next service class.<sup>35</sup> Now of course, this does not mean that all 3,206 will be able to upgrade as some would not be able to meet the contours or continue to provide a 70 dBu city grade coverage with a directional antenna.<sup>36</sup>

<sup>&</sup>lt;sup>33</sup> - *NOI* at ¶19.

<sup>&</sup>lt;sup>34</sup> - See Id. ("...to create a procedure whereby an LPFM station in the reserved band [...], regardless of Zone or station class, could be designated as a Section 73.215 facility...")

<sup>&</sup>lt;sup>35</sup> - See Appendix B.

<sup>&</sup>lt;sup>36</sup> - See 47 C.F.R. §73.215, also see 47 C.F.R. §73.315(a).

24. In the following table, we summarize the impact of those 3,206 FM stations going through a wholesale upgrade in class to the next service class. Again, keep in mind, not all full-service FM stations will be able to upgrade due to contours or community coverage requirements:

	LPFM stations impacted by potential upgrading FM stations in Zones I and I-A	LPFM stations impacted by potential upgrading FM stations in Zone II	LPFM stations impacted by potential upgrading FM stations in either zone <sup>37</sup>
LPFM is already short- spaced to full-service station based on a previously-filed application.	19	48 (3 impacted by upgrade-eligible Class A stations)	64
Full-service FM upgrade will result in a new co or first-adjacent channel §73.807 short spacing thus restricting the LPFM station's ability to move or blocking a new station.	9	78 (0 impacted by upgrade-eligible Class A stations if REC's proposed change to §73.807 is adopted)	81
Full-service FM upgrade will result in a new secondadjacent channel §73.807 short-spacing adding an additional requirement for LPFM stations in the event of a move or a new station.	34	49 (22 impacted by upgrade-eligible Class A stations) <sup>38</sup>	78
LPFM stations that currently do not meet the §73.807 guideline for no interference received. These stations will receive increased interference.	115	225 (89 impacted by upgrade-eligible Class A stations)	319
LPFM stations that currently do meet the \$73.807 guideline for no interference received but will no longer meet that guideline if the full service station upgrades to the next service class.	424	339 (51 impacted by upgrade-eligible Class A stations)	749
Total LPFM stations impacted	601	739	1,227

<sup>&</sup>lt;sup>37</sup> - This report goes through each full-service FM station that would be eligible for the next service class if the full-service FM station that §73.215 protection is being sought to is operating at less than 92 percent of their maximum facility. Then it looks at each LPFM station to see how the increase in class impacts the LPFM station. For each LPFM station, we look at the worst-case scenario by FM stations in each zone. Since some LPFM stations can be impacted by both FM stations in Zones I/I-A and II, the numbers will not add up properly across. The fourth column looks at every LPFM station "touched" and what the worst-case scenario is for that LPFM station.

<sup>&</sup>lt;sup>38</sup> - There are currently 21 LPFM stations in Zone II that are currently second-adjacent channel short-spaced to Class A stations eligible for upgrade. These LPFM stations would actually be put in a better situation if the actual field strength received at the LPFM site increases as it will allow an LPFM station more flexibility to modify and do so with a smaller interfering contour towards the short-spaced Class A FM station.

25. Currently, there are 2,176 licensed LPFM stations. In a worst-case scenario based on this study targeting §73.215 upgrades towards FM stations operating with less than 85% of their full facility, these upgrades would have an adverse impact **as many as 56% of LPFM stations** ranging from interference due to an increased noise floor to short-spacing and in a few cases, potential displacement in accordance with §73.809.<sup>39</sup> Of course, the results could be worse if the full-service FM station does not upgrade at the same location they are currently at. We must acknowledge that when you have a secondary service protecting a primary service with artificially increased reference service contours which would provide a "padding" to ease the string of the upgrade and despite that "padding", it has the potential of touching half of the stations in a particular service, we need to consider the impact of the §73.215 upgrades on other secondary services that do not have this "padding" such as FM translators and Class D noncommercial educational broadcast stations.<sup>40</sup> This includes the very highly publicized FM translators obtained through the AM Revitalization auction windows #99 and #100.

# ii. A rural-based §73.215 "waiver" approach may be more desirable than a nationwide change.

26. When you review the original *Petition* and the context it was written in, it may suggest that the petitioner may have been really seeking the new §73.215 rule to accommodate rural Class A FM stations with the ability to upgrade to Class C4 only. Like with the same effect that REC and others in the LPFM community have been promoting as a benefit for increasing from 100 to 250 watts ERP, a similar improvement could also help some Class A stations reach more rural areas and improve building penetration within their existing service area. A part of REC's advocacy is to preserve and enhance rural broadcasting but to do so in a manner that protects LPFM stations. SSR Communications has discussed the possibility of having a policy in place that would allow stations to ask for a waiver of §73.215 to reclassify a certain station as

<sup>&</sup>lt;sup>39</sup> - See 47 C.F.R. §73.809(a)(1).

<sup>&</sup>lt;sup>40</sup> - See 47 C.F.R. §74.1204(a) in respect to translators; also see 47 C.F.R. §73.509(b) in respect to Class D noncommercial educational stations.

to permit contour overlap.<sup>41</sup> After reviewing the record, the various reports that REC has conducted and looking at the overall impact that Class C4 has on LPFM stations outside of urban and suburban areas, REC does feel that a limited number of §73.215 waivers could be handled under the following restrictions:

- Only Class A to C4 upgrades permitted (and therefore only in Zone II),
- The 60 dBu protected service contour of the existing Class A station may not overlap any U.S. Census Bureau designated Urbanized Area<sup>42</sup>,
- The 60 dBu protected service contour of the upgraded Class C4 facility may not create overlap with more than 33 percent of the population inside any U.S. Census Bureau designated Urbanized Area,
- Incumbent facilities must be licensed at their current facility parameters for at least 20 years and must currently have a service contour of less than 92 percent of a full reference facility,
- A "show cause" process must be used to request the §73.215 reclassification and the incumbent broadcast station would have 6 months to file a construction permit.<sup>43</sup>
- 27. It is REC's position that this proposed waiver process would still meet a very limited need that is at the heart of the SSR Petition but would not cause a nationwide land-rush of §73.215 requests that would destroy the viability of many LPFM stations and FM translators. By requiring a current of less than 92 percent of the reference service contour, we are striking a balance between addressing the issue of warehousing spectrum, the concerns of incumbent broadcasters and allowing deep rural stations to improve their signals.<sup>44</sup>

<sup>&</sup>lt;sup>41</sup> - See SSR Communications, Inc. *ex parte* meetings with various Commission staff members on June 18, 2018.

<sup>&</sup>lt;sup>42</sup> - "Urbanized Area" is defined in 76 F.R. 53039-53043 (2011). Consistent with Commission policies related to broadcast allocations, REC proposes the overlap limitations apply only to Urbanized Areas (UA) but not to Urban Clusters (UC).

<sup>&</sup>lt;sup>43</sup> - We had also reviewed the possibility of adding language that would state that applicants requesting waivers must propose a facility that does not cause interference to FM translators or LPFM stations. REC's interpretation of LCRA §5(3) would suggest that preventing an application opportunity by a primary station on the basis of the presence of a secondary FM translator or LPFM station would violate the statute which mandates that FM translators, FM boosters and LPFM stations remain secondary to existing and modified full-service stations.

<sup>&</sup>lt;sup>44</sup> - For reference, the reference service contour of a Class C0 station is 90.8% of a Class C station, a Class C1 station is 86.7% of a Class C0 station, a Class C2 station is 72.2% of a Class C1, a Class C3 station is 74.9% of a Class C2 station, a proposed C4 service class would be 85.2% of a Class C3 station and a Class A station would be 85.0% of a proposed C4 service class.

#### IV. CONCLUSION

- 28. In the NOI, the Commission states twice that they would be reluctant to adopt any proposal that would have a significant negative impact on FM translators and LPFM stations. While the establishment of Class C4 without any equivalent service in Zones I and I-A would have a moderate impact on LPFM stations, the wholesale nationwide application of a change to \$73.215 to use actual contours thus resulting in many urban, suburban and rural service class increases would be devastating to between one-third and one-half of all LPFM stations and because of the lack of a buffer zone, would be even much more devastating to FM translators, especially those that were applied for in the recent Auction 99 and 100 filing windows who may be feeling like victims of a bait-and-switch scheme.
- 29. The impacts of C4 on LPFM stations can be partially alleviated with using the same co-channel and first-adjacent channel distance separation requirements that currently apply on LPFM to Class A relationships. Some stations may continue to experience a noise floor increase. Some of these LPFM stations may be able to change channels but we must recognize that some will not. To deal with a unique rural need to expand service outside of urbanized areas, REC is accommodating to a very restricted waiver concept that would allow Class A to C4 upgrades on facilities meeting strict guidelines.
- 30. Despite any perception that our positions may appear to be accommodating to Class C4 and a very restricted \$73.215 waiver process, REC's overall position remains that the Commission's priority should be to improve localism through the growth of the LPFM service by adding more voices to the urban, suburban and rural airwaves. While a subset of Class A stations could provide a better signal and additional choices to underserved areas, the Commission's goal must be diversity on the dial. Diversity comes from bringing in more voices on the air through a new LPFM filing window and checks and balances in place to assure integrity in the LPFM application process and ownership regulations. REC does feel that any rulemaking to upgrade rural stations to Class C4 should be paired with a rulemaking to upgrade

LPFM stations to 250 watts as proposed in RM-11749 and supplemented in RM-11810. Both petitions do similar changes to their services and can be seen as an overall rural solution.

31. The Commission should explore this and all of the other ideas on the table and perhaps it will be the "out of the box" ideas (restrictive waivers, use of Channels 5 and 6 for FM sound broadcasting, domestic use of the 11-meter broadcast band, etc.) that would, in the long term, be the best solution. For now, the NOI, as written, proposes to hurt more than it will heal.

Respectfully submitted,

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August 12, 2018

#### APPENDIX A

#### **PROPOSED RULES**

Part 73 of Title 47 of the U.S. Code of Federal Regulations is proposed to be amended to read as follows:

#### Part 73 - Radio Broadcast Services

1. Section 73.807 is proposed to be modified, as follows:

#### §73.807 Minimum distance separation between stations.

\* \* \* \* \*

(a)(1) An LPFM station will not be authorized initially unless the minimum distance separations in the following table are met with respect to authorized FM stations, applications for new and existing FM stations filed prior to the release of the public notice announcing an LPFM window period, and vacant FM allotments. LPFM modification applications must either meet the distance separations in the following table or, if short-spaced, not lessen the spacing to subsequently authorized stations.

Station Class Protected by LPFM	Separ	l Minimum ration m) For No Interference Received	First-adjacent Channel Minimum Separation (km)  For No Interference Required Received		Second and third adjacent Channel Minimum Separation (km)
D A B1 B C4 C3 C2 C1 C0	24 67 87 112 67 78 91 111 122 130	24 92 119 143 104 119 143 178 193 203	13 56 74 97 56 67 80 100 111 120	13 56 74 97 57 67 84 111 130 142	6 29 46 67 34 40 53 73 84 93

# **APPENDIX B**

# RAW DATA FROM §73.215 UPGRADE STUDY AND IMPACTS TO LPFM STATIONS

# APPENDIX C

# RAW DATA FROM C4 IMPACT TO LPFM STUDY

Appendices B and C have been placed in a separate file included with this pleading.